# Weed biocontrol in temperate Australia – a new manual for best management practice

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**Summary** Weed biocontrol using insects, mites and pathogens has a long and distinguished history in Australia. Successful long-term weed biocontrol requires not only the motivation, expertise and capacity, but also the latest best practice guidelines if practitioners are to effectively implement programs. Best practice biocontrol is an evolving field-based science. Sourcing quality data on the latest methodology is imperative and an ongoing process. For new programs, methodology is usually recommended by researchers, however over time, practitioners fine tune and develop the methodology which becomes best practice. Quality data on best practice may not exist, and even where data does exist, there is often poor communication of this data between researchers, extension staff and practitioners. Experience has shown that biocontrol is optimised when there is open and frequent communication between these role players. Developing and communicating best practice can be further complicated by geography which leads to varying methodologies. A best practice manual has been developed for weed biocontrol in temperate Australia. This practitioner friendly manual addresses common questions and methodology issues and provides the key steps for undertaking weed biocontrol programs. The manual gives biocontrol recommendations for 45 weeds and provides detailed information on their biocontrol agents. Information for biocontrol agents includes their lifecycle, impact and abundance; and how to collect, rear and monitor them. This manual will serve as a valuable tool for practitioners and will supplement the weed biocontrol course that is offered by NSW DPI.

**Keywords** Biological control, biocontrol, weed management, communication, extension, methodology.